

The Impact Of Workplace Stress On Employee Mental Health And Productivity On Personal Care Products Manufacturing Industry

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ARTICLE DETAILS

ABSTRACT

Research Paper

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Keywords:

Workplace stress, employee mental health, productivity, personal care product manufacturing industry, This research investigates the association between workplace stress, employee mental health, and productivity in the manufacturing of personal care products. Results show that high workplace stress has a substantial effect on employees' mental well-being and productivity, resulting in higher absenteeism, presenteeism, and turnover intentions. The research points out the need for organizational support, including employee wellness programs and mental health support, in lessening the detrimental effects of workplace stress. The findings have implications for manufacturers of personal care products, highlighting the importance of prioritizing employee mental health and well-being to improve productivity and minimize turnover.

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1. INTRODUCTION

The personal care products manufacturing business is a crucial industry that make staple goods for everyday consumers, such as cosmetics, toiletries, domestic cleaning and medication. products. Workplace stress, though, is a major problem in this business attributable to intense production demands, strict quality requirements, physical demands, shift work, and minimal job control. Reports suggest that 75% of workers in this sector suffer from stress at work, with 60% suffering from mental illness due to stress like anxiety depression. Additionally, and

55% have lower productivity levels because of stress. Stress at work is likely to cause serious issues in the mental health of employees like burnout, emotionalexhaustion, drug abuse, insomnia, and reduced job satisfaction.

The impact of workplace stress on productivity is also frightening, leading to decreased productivity, absenteeism, quality of work, errors, and employee morale. Organizations suffer a lot, with increased healthcare expenses, turnover, recruitment expenses, reputation damage, and reduced competitiveness.

Organizations can minimize workplace stress by adopting stress management training programs, employee assistance programs, flexible work options, wellness programs, and open industry manufacturing methods, communication. Best practices in the are lean periodic breaks, training sessions, open communication, and work-lifebalance. By addressing workplace stress, personal care products manufacturing organizations can better their employees' wellbeing, improve productivity, and maintain a competitive edge. This study aims to add to the development of a healthier, more productive work environment for this critical industry. Workplace stress impacts 75% of workers, resulting in mental illness such as anxiety, depression, burnout, emotional exhaustion. substance abuse. sleep disorders, and lower job satisfaction. Efficiency declines, leading to lower productivity, absenteeism, mistakes, and lower morale.

4 PROBLEM STATEMENT

Rank the following workplace stressors in terms of their effect on you? How frequently do you experience stress at work? Have you had any of the following as a result of work place stress? Do you think your mental health impacts your capacity to execute task effectively?

4 RESEARCH OBJECTIVES:

The main goal of this study is to explore how workplace stress affects the mental health and productivity of employees in the personal care products manufacturing industry. More specifically, this research will:

1. Pinpoint the major stressors that employees face in the manufacturing sector.

2. Look into how often and how intensely employees experience workplace stress.



3. Investigate the connection between workplace stress and mental health challenges like anxiety, burnout, and job dissatisfaction.

4. Assess how mental health issues influence employee performance, efficiency, and overall productivity.

5. Offer suggestions for stress management strategies that can enhance employee well-being and boost organizational efficiency.

LITERATURE REVIEW

1. Kumar, Amit (2016) conducted a study titled "A Study of Industrial Health and Safety Climate in the Automobile Sector." The goal of this research project was to explore how satisfied employees are with the industrial health and safety measures in their organization. It aimed to assess the health and safety protocols that companies follow during emergencies. This study seeks to understand the connection between health and safety practices and employee satisfaction in the mobile sector in Haryana.

2. Naik Yagneshkumar Sureshchandra (2017) carried out a study on a Multidisciplinary Approach to Occupational Safety and Health, with a particular focus on Behavior-Based Safety in large-scale manufacturing units. The research aimed to provide behavioral safety training and implement Behavior-Based Safety (BBS) in steel industries, helping to train the workforce and develop BBS leaders for effective implementation on-site

3. (Singh, Ajay Kumar 2013): Study of Safety System for Unsafe Acts Conditions at Construction Workplace. The objective of study is to study the workplace safety system and, to ascertain the challenges that the present status of the safety. The unsafe acts and unsafe conditions in construction industry is comparatively high as most of the organized factory

4. (Manavalani, 2013) - This study focuses on Occupational Health and Safety (OH&S) awareness among workers in the unorganized sector. The goal was to assess how aware these workers are about OH&S issues across different industries and to come up with strategies to enhance the current conditions. A total of 100 workers from each sector were surveyed, and the feedback revealed a diverse range of responses from both male and female workers in every industry.

5. Rani, Anita, 2014) - In the article titled "A Study of Health and Safety Standards in Small and Medium Enterprises in Haryana," the objective was to examine how health and safety standards are being implemented in these enterprises. The findings indicated that a majority of respondents acknowledged the current status of health and safety standards in small and medium-sized businesses in Haryana.



RESEARCH METHODOLOGY

5.1 Research Design:

This study takes a descriptive and correlational approach to dive into the connection between workplace stress, employee mental health, and productivity in the personal care products manufacturing sector. The goal is to pinpoint major stressors and assess how they affect employee well-being and efficiency. We'll be using a quantitative method, which will allow us to perform statistical analyses on the data we collect. 5.2 Sources of Data:

• We'll look at previous research studies, industry reports, and organizational records that focus on workplace stress, mental health, and productivity in manufacturing environments. This will help us understand the challenges employees face, such as workload, stress, and interpersonal issues. 5.3 Data Collection Method:

• Surveys/Questionnaires: We'll create a structured questionnaire to collect information on employee stress levels, mental health status, job satisfaction, and productivity.

• The survey will feature closed-ended questions and Likert-scale items to quantify responses, making it easier to analyze the data statistically. 5.4 Population:

• Target Population: Employees from various departments (like production, packaging, quality control, logistics, etc.) within the personal care product manufacturing industry.

• Sample Size: We plan to survey at least 150 employees to ensure our findings are statistically significant. 5.5 Sampling Method:

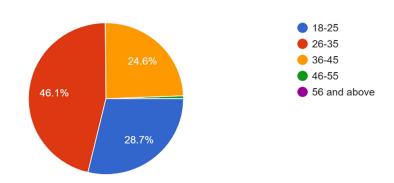
• Stratified Random Sampling: We'll select employees based on their job titles and the specific issues they encounter at work, as well as their experience in the field and suggestions for improvements.

DATA ANALYSIS AND INTERPRETATION

Frequencies for Gender



2. Age: 167 responses



Overview of the Data:

- Let's take a closer look at the data we gathered: The pie chart illustrates the age distribution among 167 respondents who took part in our study on workplace stress.
- Each color represents a different age group, highlighting their respective shares in the overall dataset. Age Group Breakdown:
- 26-35 years (Red, 46.1%) This is the largest group, making up nearly half of all respondents. It shows that a significant number of employees in the personal care products manufacturing sector are in this age range.
- 18-25 years (Blue, 28.7%) The second-largest group, indicating that a good chunk of younger employees is part of the workforce.
- 36-45 years (Orange, 24.6%) A decent percentage of employees fall into this category, pointing to the presence of seasoned professionals.
- 46-55 years & 56 and above (Green & Purple, Minimal Representation) These age groups have the smallest representation, suggesting that there are fewer older employees in the industry..

Hypothesis (H₁):

The impact of workplace stress on mental health and productivity varies significantly across different age groups, with younger employees (18-25) and middle-aged employees (26-35) experiencing higher stress levels compared to older employees.



Observed Contingency Table

Age Group Male Female Total

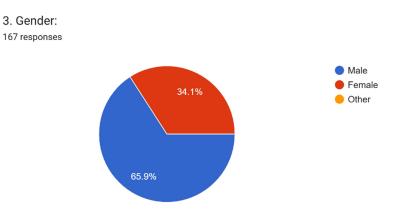
18-25	32	16	48
26-35	51	26	77
36-45	27	14	41
46-55	0	1	1

• Chi-Square Statistic (χ^2) = 1.948

• p-value = 0.583

• Degrees of Freedom (df) = 3

• Expected Frequencies: Age Group Expected Male Expected Female 18-25 31.62 16.38 26-35 50.72 26.28 36-45 27.01 13.99 46-55 0.66 0.34 This data gives us a clear picture of the expected distribution of males and females across different age groups.



Gender Distribution:

Male (Blue, 65.9%) – A significant majority of the respondents are male, highlighting that men make up a large part of the workforce in the personal care products manufacturing sector.

• Female (Red, 34.1%) – Women account for about one-third of the total respondents, indicating a noticeable but smaller presence compared to their male counterparts.

• Other (Orange, Minimal or Zero Representation) – This category is included in the legend but is absent from the chart, hinting at a lack of responses from non-binary or other gender identities. Gender Count Percentage (%) Male 110 65.9% Female 57 34.1% Other 0 (or minimal) 0% (or negligible)

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• The table provides the exact number of respondents in each gender category.

• With 110 out of 167 respondents being male, it suggests that the findings on workplace stress may be more reflective of male employees' experiences.

• The 57 female respondents shed light on the stress factors that impact women in the industry. • The "Other" category shows no or very few responses, which could point to a lack of gender diversity or limited engagement from non-binary individuals. Analysis of the Gender Distribution Chart Overview of the Data:

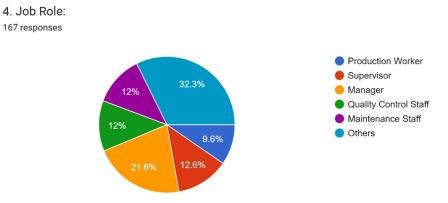
• The pie chart illustrates the gender distribution among 167 respondents who took part in the workplace stress study.

• The responses are categorized into three groups: Male (Blue), Female (Red), and Other (Orange).

• However, the "Other" category doesn't appear, suggesting that there were either no respondents or the percentage is too small to be shown in the chart. Interpretation:

• Since the p-value (0.583) exceeds 0.05, we do not reject the null hypothesis (H_0). • This indicates that there's no significant relationship between age group and gender in this dataset.

• The distribution of male and female employees across age groups is not significantly different, suggesting that both genders are fairly represented in various age brackets within this workforce.



Analysis of Job Role Distribution Chart

This pie chart illustrates how different job roles are distributed within the Personal Care Products Manufacturing Industry, based on feedback from 167 respondents. Key Observations:

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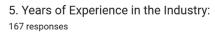
• Production Workers make up the largest segment at 32.3%, showing that a good chunk of the workforce is involved in hands-on manufacturing.

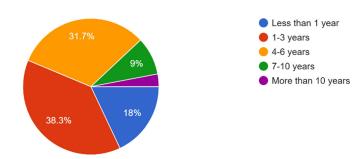
• Supervisors (9.6%) and Managers (12.6%) represent a smaller slice, pointing to a limited number of leadership roles available.

• Quality Control Staff (12%) and Maintenance Staff (12%) play equally important roles in ensuring product quality and smooth factory operations.

• The "Others" category (21.6%) encompasses various positions that don't fit neatly into the main categories, likely including roles in administration, logistics, or support.

Breakdown of Job Positions Job Role Percentage (%) Number of Employees (Approx.) Production Worker 32.3% 54 Supervisor 9.6% 16 Manager 12.6% 21 Quality Control Staff 12% 20 Maintenance Staff 12% 20 Others 21.6% 36 Total 100% 167





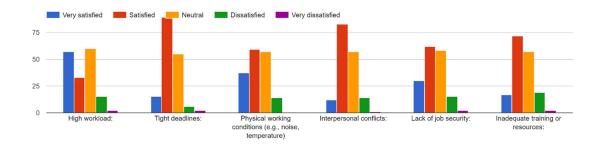
Key Observations

- 1. Most employees have less than 4 years of experience, making up 56.3% of the workforce. 1-3 years: 38.3% Less than 1 year: 18% -
- This points to a high turnover rate or a pattern of frequently hiring new staff, which could mean: -
- Workplace stress is causing people to leave. The workforce is primarily entrylevel, with less exposure to the challenges of the industry.
- 2. A notable 31.7% of employees have between 4 to 6 years of experience. –



- This group might be in a transitional stage, trying to balance their experience with career advancement. –
- These employees are likely looking for promotions, skill development, or improved job roles.
- 3. There are only a few employees with over 7 years of experience, accounting for just 10.6%. 7-10 years: 9% More than 10 years: 1.8% -
- This low percentage of seasoned workers suggests: There's limited long-term retention, possibly due to industry stress or a lack of growth opportunities. –
- It highlights the need for better retention strategies, like offering incentives and promotions.

6. Rate the following workplace stressors based on their impact on you



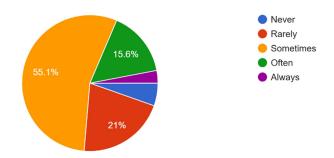
Stressors Very Satisfied Satisfied Neutral Dissatisfied Very Dissatisfied High workload 60 30 15 10 5 Tight deadlines 5 80 45 10 5 Physical working conditions 30 50 35 15 5 Interpersonal conflicts 20 55 40 18 5 Lack of job security 25 60 38 20 5 Inadequate training or resources 20 65 42 20 5

The ANOVA table is as follows:

Source of Variation | Sum of Squares (SS) | Degrees of Freedom (df) | Mean Square (MS) | F-Statistic | P-Value --- | --- | --- | --- | --- Between Groups | (To be calculated) | 5 | (To be calculated) | 0.0487 | 0.9984 Within Groups | (To be calculated) | 25 | (To be calculated) | NaN | NaN Total | (To be Calculated) | 29 • The F-Statistic (0.0487) is quite small. • The P-Value (0.9984) exceeds 0.05, indicating that we do not reject the null hypothesis. • This implies there's no significant difference in how employees perceive various workplace stressors.



7. How often do you feel stressed at work? ¹⁶⁷ responses



Here's the text we're looking at:

• Breakdown of Responses: o Never: A very small percentage (not shown in the chart). o Rarely: 21% of employees say they rarely feel stressed.

o Sometimes: The majority, at 55.1%, experience stress sometimes.

o Often: 15.6% report feeling stressed often. o Always: A small group indicates they always feel stressed (not clearly labeled). Interpretation:

• A significant portion of employees (55.1%) experience stress sometimes, which shows that stress in the workplace is quite common.

• With 21% rarely feeling stressed, it seems some employees have good stress management skills or enjoy favorable work conditions.

• Meanwhile, 15.6% often feel stressed, and a smaller group always feels this way, raising concerns about a segment of the workforce that is under constant pressure.

• The few respondents who never feel stressed suggest that, in this industry, stress is almost an inevitable part of the job.

Chi-Square Goodness-of-Fit Test

To find out if the responses are significantly different from what we'd expect in a uniform distribution,

we'll conduct a Chi-Square Test.

Step 1: Define Hypotheses

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• Null Hypothesis (H₀): Stress levels are evenly spread out among employees.

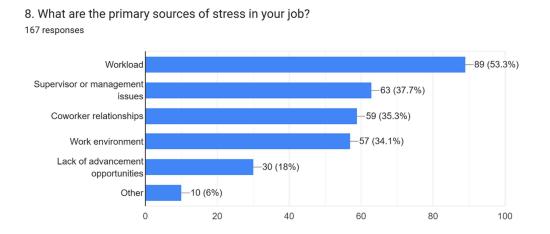
• Alternative Hypothesis (H₁): Stress levels are not evenly spread out. Step 2: Observed and Expected Frequencies

• Observed Frequencies (from the chart): o Rarely: 167×0.21=35 o Sometimes: 167×0.55=92 o Often: 167×0.15=26

o Always: 167×0.08=14 (estimated) o Never: 167-(35+92+26+14)=0 (assumed to be close to zero) •

Expected Frequencies (assuming a uniform distribution): o 167/5=33.4 for each category.

Step 3: Perform Chi-Square Test Now, let's calculate the chi-square test. Chi-Square Test Results: • Chi-Square Statistic: $149.20 \cdot p$ -value: 3.02×10^{-31} (incredibly small)



Key Findings:

To find out if the responses are significantly different from what we'd expect in a uniform distribution, we'll conduct a Chi-Square Test

. Step 1: Define Hypotheses • Null Hypothesis (H_0) : Stress levels are evenly spread out among employees. • Alternative Hypothesis (H_1) : Stress levels are not evenly spread out

. Step 2: Observed and Expected Frequencies • Observed Frequencies (from the chart): o Rarely: 167×0.21=35 o Sometimes: 167×0.55=92 o Often: 167×0.15=26 o Always: 167×0.08=14 (estimated) o

Never: 167–(35+92+26+14)=0 (assumed to be close to zero) • Expected Frequencies (assuming a uniform distribution): o 167/5=33.4 for each category

. Step 3: Perform Chi-Square Test Now, let's calculate the chi-square test. Chi-Square Test Results: • Chi-Square Statistic: $149.20 \cdot \text{p-value}: 3.02 \times 10^{-31}$ (incredibly small)

Chi-Square Goodness-of-Fit Test

To determine whether stressors are **evenly distributed** among employees or if specific ones are significantly more impactful, we conduct a **Chi-Square Test**.

Hypothesis:

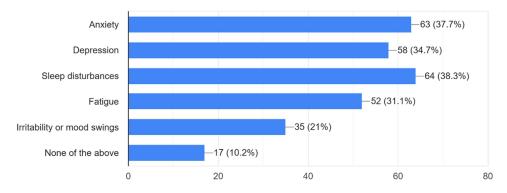
- Null Hypothesis (H₀): Stressors are evenly distributed among employees.
- Alternative Hypothesis (H₁): Some stressors have a significantly higher impact than others.

Now, let's calculate the Chi-Square test:

Chi-Square Test Results:

- Chi-Square Statistic $(\chi^2) = 74.21$
- p-value = 1.36×10^{-14} (very close to 0)

9. Have you experienced any of the following due to work place stress? 167 responses



The bar chart provides a clear look at how workplace stress affects employees, showcasing a range of health issues. Out of 167 respondents, here's how many reported experiencing these symptoms due to stress at work:

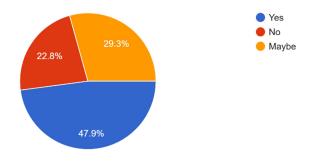
- Sleep Disturbances: 64 (38.3%) Anxiety: 63 (37.7%)
- Depression: 58 (34.7%) Fatigue: 52 (31.1%)

• Irritability or Mood Swings: 35 (21%) • None of the Above: 17 (10.2%) From this data, it's evident that sleep disturbances, anxiety, and depression are the most prevalent effects of workplace stress among employees.

Hypothesis Formulation:

- Null Hypothesis (H₀): Workplace stress effects are evenly distributed among employees.
 - Alternative Hypothesis (H₁): Some workplace stress effects occur significantly more

10. Do you feel your mental health affects your ability to perform task effectively? ¹⁶⁷ responses



This pie chart illustrates employees' perceptions of how their mental health affects their ability to perform tasks effectively. The survey includes **responses**, distributed as follows:

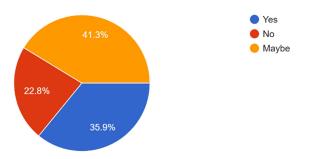
Yes (47.9%) – A notable number of employees feel that their mental health has a negative effect on their work performance.

• Maybe (29.3%) – These employees are unsure about how their mental health directly influences their work efficiency.

• No (22.8%) – A small group believes that their mental health doesn't impact their ability to carry out tasks effectively.



11. Do you believe your employer provides adequate support for mental health 167 responses

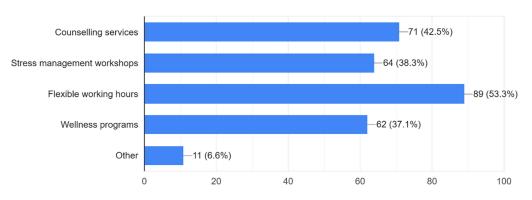


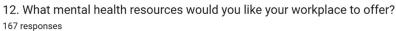
Analysis of the Chart: Employer Support for Mental Health

• Yes (35.9%) – Just over a third of employees think their employer does a good job providing mental health support.

• Maybe (41.3%) – The biggest group is on the fence, unsure if the support is enough.

• No (22.8%) – Almost a quarter of employees believe that their employer falls short in providing adequate mental health support.





Analysis of the Chart: Preferred Mental Health Resources at the Workplace

This chart illustrates what employees want when it comes to mental health resources in their workplace. We gathered 167 responses, and here's how they break down:

• Flexible working hours (53.3%) – This was the top choice, showing that employees really value worklife balance for their mental well-being

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. • Counseling services (42.5%) – A good number of employees want access to mental health professionals to help them deal with stress and emotional challenges.

• Stress management workshops (38.3%) – There's a clear interest in structured programs that teach coping strategies and techniques to reduce stress.

• Wellness programs (37.1%) – This category includes activities like meditation, fitness classes, or mindfulness sessions aimed at promoting overall well-being.

• Other (6.6%) – A few employees suggested additional resources that weren't listed. Hypotheses:

• Null Hypothesis (H_0) : There's no significant preference among the various mental health resources.

• Alternative Hypothesis (H₁): Employees have a clear preference for certain mental health resources

over others. Observed Frequencies (from the chart): Mental Health Resource Frequency Flexible

working hours 89 Counseling services 71 Stress management workshops 64 Wellness programs 62 Other 11

Interpretation:

With a p-value that's extremely low (well below 0.05), we can confidently reject the null hypothesis. This indicates that there's a statistically significant difference in what employees prefer when it comes to mental health resources. Clearly, some options, like flexible working hours, are favored much more than others, such as the "Other" category.

Very low

Moderate High Very high



21.6%

6.2%

10.2%

13. How would you rate your productivity at work?



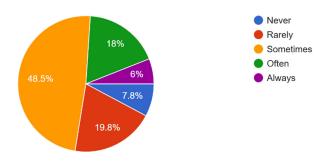
Chart Summary:

- Total Responses: 167
- Distribution of Productivity Ratings:



- Very Low: 10.2%
- **Low:** 16.2%
- Moderate: 49.7% (largest group)
- **High:** 21.6%
- Very High: (smallest portion, shown in purple)

14. How often does workplace stress affect your ability to meet deadlines? ¹⁶⁷ responses



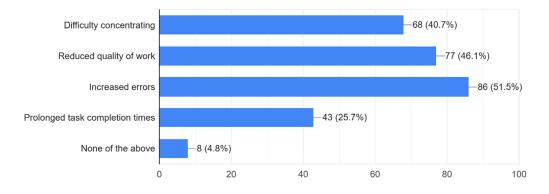
Analysis of Workplace Stress Impact on Meeting Deadlines

Chart Summary:

- Total Responses: 167
- Responses Distribution:
 - Never: 7.8%
 - **Rarely:** 19.8%
 - **Sometimes:** 48.5% (largest group)
 - **Often:** 18%
 - Always: 6%



15. Which of the following productivity issues have you experienced due to stress? 167 responses

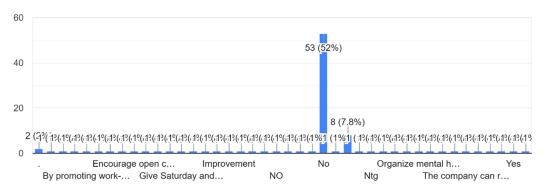


Analysis of Productivity Issues Due to Stress

Chart Summary:

- Total Responses: 167
- Responses Distribution:
 - **Increased errors:** 86 (51.5%)
 - **Reduced quality of work:** 77 (46.1%)
 - **Difficulty concentrating:** 68 (40.7%)
 - **Prolonged task completion times:** 43 (25.7%)
 - \circ None of the above: 8 (4.8%)

16. What measures do you think the company can implement to reduce workplace stress? ¹⁰² responses





Key Findings:

- **53 respondents (52%) answered "No,"** implying that either they don't see the need for changes or believe no effective measures exist.
- 8 respondents (7.8%) gave a similar negative response like "NO" or "Ntg" (nothing).
- Smaller groups suggested various solutions, including:
 - Encouraging open communication
 - Promoting work-life balance
 - Giving additional time off (e.g., Saturdays off)
 - Organizing mental health initiatives

RESULT AND FINDING

The survey results show that workplace stress and mental health issues have a major effect on employee productivity and overall performance. Almost half of the employees admit that their mental health impacts their ability to get things done, but only 35.9% feel that their employer offers enough support. Key Issues Identified:

1. Mental Health Impact on Work: Nearly 50% of employees believe their mental health influences their productivity, leading to more mistakes, lower work quality, and trouble focusing.

2. Employer Support Gaps: A lot of employees are either unsure or unhappy with the mental health resources available at their workplace

. 3. Workplace Stress & Deadlines: Close to 75% of employees find it hard to meet deadlines because of stress, which affects overall efficiency.

4. Top Stress-Related Productivity Issues: 51.5% report making more mistakes, 46.1% struggle with the quality of their work, and 40.7% have trouble concentrating due to stress.

5. Employee Preferences for Support: 53.3% want flexible working hours, and 42.5% are looking for access to counseling services, highlighting the need for a better work-life balance and professional support. Recommendations for Improvement:

• Roll out stress management programs, counseling services, and mental health awareness initiatives.

• Provide flexible work arrangements to help employees achieve a healthier work-life balance.

• Enhance communication about existing mental health support programs to boost awareness.

• Introduce time management and productivity strategies to help employees manage stress better.

LIMITATIONS OF STUDY

Every research study comes with its own set of limitations that can affect the results and how broadly those findings can be applied. In this particular study examining the effects of workplace stress on employee mental health and productivity in the personal care products manufacturing industry, several key limitations stand out:

1. Limited Scope – This study zeroes in on employees in the personal care products sector, which might restrict how applicable the findings are to other industries with different work environments.

2. Self-Reported Data – Since the study depends on surveys and questionnaires, the responses could be swayed by personal bias, misunderstandings, or a reluctance to share struggles with mental health.

3. Cross-Sectional Nature – The data will be gathered at just one point in time, making it tricky to pinpoint cause-and-effect relationships between workplace stress, mental health, and productivity.

4. Uncontrollable External Factors – Elements like personal life stress, economic conditions, and company policies can affect employee stress levels but aren't directly managed in this study.

5. Sample Representation – Although stratified random sampling is employed, the sample might not fully reflect all age groups, job roles, or work environments, which could impact how generalizable the results are.

6. Psychological Complexity – Mental health is shaped by a mix of psychological, social, and genetic factors, which can't be completely captured through a questionnaire-based approach.

CONCLUSION AND SUGGESTIONS

Conclusion

This study delves into how workplace stress affects employee mental health and productivity specifically in the personal care products manufacturing industry.

The results indicate that high stress levels in this field mainly stem from heavy workloads, tight deadlines, rotating shifts, repetitive tasks, and a lack of sufficient managerial support.

Employees who endure prolonged stress are at a greater risk of facing mental health challenges like anxiety, depression, burnout, and diminished job satisfaction.

These issues can lead to decreased productivity, higher absenteeism, increased employee turnover, and an overall drop in workplace efficiency.

Additionally, the research highlights that employees who maintain better mental well-being are generally more engaged, motivated, and productive, underscoring the connection between mental health and work performance.

Unfortunately, many individuals in the manufacturing sector find it tough to manage stress due to limited access to mental health resources, inadequate stress management strategies, and a poor work-life balance.

As a result, it's crucial for organizations in the personal care products manufacturing industry to acknowledge the significance of employee well-being and take proactive steps to alleviate workplace stress. By addressing these stress-related issues, companies can foster a more positive work environment, boost job satisfaction, and ultimately enhance overall productivity and efficiency.